Measuring for the Future: an Overview of Measurements of Progress and Sustainability on the State-Level

Are we there yet?

When reflecting upon the ideal of progress, which has been a dominant theme in the march of history in the modern era, the question inevitably arises that, if we are, in fact, stepping forward, where are we going and when will we get there? Even if we do not know exactly how the future will look, we still know that we want it to be better and can identify the aspects of the current society that need to be improved. Nevertheless, the question "Are we there yet?" becomes salient. When will we know when the future for which we are working has been achieved, and how will we know that we are, in fact, making progress? Just as we measure distance when traveling, the journey along the road of progress has necessitated measurements of its own.

Since World War II, the dominant indicator for economic progress has been the Gross Domestic Product, or GDP, which seeks to assess the sum of all economic activity happening in a country. The GDP was first developed by Simon Kuznets in a report for the US Congress in 1934 amidst the Great Depression and has since attracted increasing attention as a signifier of progress, defined as economic growth. However, Simon Kuznets himself had never intended for the GDP to be a measure of social welfare, explaining in an interview years later, "Distinctions must be kept in mind between quantity and quality of growth, between costs and returns, and between the short and long run. Goals for more growth should specify more growth of what and for what." One must not only ask where we were are *going* but where or how are we *growing*.

Consequently, there remains a need for ways of measuring the quality of growth and assessing whether or not increased economic output brings an increase in overall well-being. The United States is home to many indicator systems as state and local governments and community groups have begun such initiatives. The oldest, Jacksonville Community Council in Jacksonville, Florida, hails from as far back as 1975.

However, to track the quality of growth, one must bring not only people but also the planet, into the understanding of economics and economic progress. This report will focus on three measurement systems at the state-level in the U.S. that incorporate social and

-

¹ Simon Kuznets. "How To Judge Quality". The New Republic, October 20, 1962

environmental sustainability.² First, a number of states have started broad-based indicator projects that assess progress in a number of fields, such as economy, health, environment, and democratic governance. Projects like Arizona Indicators and Minnesota Compass provide a wealth of data that enable community leaders—from government, business, and nonprofit sectors—to locate problems and come together to debate and advance appropriate solutions. As both exist outside of the state government itself, they do not directly influence policy but rather provide the resources for an informed debate about the success of current programs and the direction of the future. Within the framework of government policy itself, several initiatives have arisen out of state planning efforts; sometimes, they involve setting goals and targets for the future of the state and at other times just provide a sense of direction and of shared purpose. Minnesota Milestones, Oregon Benchmarks, and Virginia Performs all arose out of such efforts for planning and accountability. New Jersey's Sustainable Project and the ongoing Hawaii 2050 initiative also arose out of such a context; however, they distinguished themselves from the others by centralizing the concept of sustainability in their state's vision.

Second, other states have been home to initiatives to adopt composite indicators, those that provide an aggregate measure directly comparable with GDP. Maryland is currently the only state to have officially adopted use of the Genuine Progress Indicator; however, there have been efforts to calculate the GPI in other states. Although the oldest state-level GPI calculation came out of Vermont, there was no formal advocacy effort attached to the report; consequently, Maryland's effort will be juxtaposed with the efforts of an advocacy group in Utah, the Utah Population and Environment Coalition. Moreover, in Minnesota, the state's Sustainable Development Initiative proposed its own composite index, the Minnesota Progress Indicator, in 2000; although this was never adopted, it provides an alternative to GPI worth further analysis. Last, this report will look at the recent renewed global interest in subjective well-being as a complement/alternative to these measures as a method of assessing progress, through the work of Gross National Happiness-USA (GNH-USA) in the State of Vermont; such focus on subjective well-being can offer a democratic evaluation of how policies influence the quality of life of average citizens.

_

² Although this report will focus on state-level indicator projects, many initiatives have arisen on a city or town-level, and the Boston Indicators Project and Sustainable Seattle have both served as models for many other programs.

The Value of an Informed Public

Arizona Indicators

Arizona Indicators was established in 2007 by the president of Arizona State University, who wanted to provide a centralized place for data about the state's competitiveness. Although founded at ASU, there are a number of community partners that manage the project, including the Arizona Community Foundation, the Valley of the Sun United Way, *The Arizona Republic*, and the Arizona Department of Commerce. AZ Indicators has benefited from a strong relationship with the *The Arizona Republic*, which features some of the indicators in its "Viewpoints" section in the Sunday paper and has created interactive tools for the data. Together, AZ Indicators and *The Arizona Republic* are working on comparing Phoenix to peer cities.³

As Arizona Indicators is not a state-run body, it does not establish targets itself; rather than starting with goals and then finding the data with which to track them, it begins with the data and allows community leaders to determine appropriate goals. The indicators that provide this data are determined by ASU faculty with relevant research backgrounds. Arizona Indicators is divided into the following topics: Economy, Public Finance, Education, Innovation, Sustainability, Culture, Health, Human Assistance, Criminal Justice, and Transportation; each content tab is assigned to an ASU faculty member with relevant research experience. Although the indicators themselves were determined by the faculty, there is still a strong two-way engagement process with the community. The staff has been attuned to what their site's visitors want to see and have learned that demographics page has garnered particular attention; moreover, they have done outreach to nonprofits and philanthropic foundations, who are frequently requesting additional pieces of data.

Ms. Whitsett, the manager of the Arizona Indicators Project, noted that one of the main obstacles for indicators is asserting their relevance because they are not advocating any particular policy solution; however, their significance is important in making sure that both sides come to

³ Morrison Institute for Public Policy. *Arizona Indicators*. 2011. http://arizonaindicators.org/.

the table with the same information.⁴ Without such a common ground, there is little hope for progress.

Minnesota Compass

The inspiration for Minnesota Compass and its predecessor, Twin Cities Compass, stemmed from a trip to Boston by a group of business and civic leaders who had been interested in the Boston Indicators Project.⁵ The Wilder Foundation, a nonprofit health and human services organization in St. Paul, became the head coordinator in the effort to create Twin Cities Compass, a key indicator system for the metropolitan area, and launched this platform in January of 2008. This sparked interest in a state-wide indicator system, and Minnesota Compass was officially launched in January of 2010. Minnesota Compass receives funding from the following foundations: 3M Foundation, Blue Cross and Blue Shield of Minnesota Foundation, Bush Foundation, Greater Twin Cities United Way, the McKnight Foundation, B. C. Gamble, P.W. Skogmo Fund of the Minneapolis Foundation, the Saint Paul Foundation, Wells Fargo Foundation Minnesota, and the Amherst H. Wilder Foundation.⁶

The layout for Compass was determined over a series of roundtables with leaders from businesses, nonprofits, government, and academia with an emphasis on the "90% in the reasonable middle." The discussions were coordinated over a set of two meetings; during the first, group was presented with a list of potential indicators for their respective topic and then offered feedback and evaluation. The participants were reconvened at a second meeting to go over the narrowed set. Minnesota Compass also convenes sessions on specific issues of interest, such as disparities. The aging of the state's population and the growing socioeconomic disparity among racial/ethnic groups has garnered much attention recently, and Compass has been at the forefront of providing the actors working to improve their state's future with the information they need.

For each indicator heading, MN Compass provides a set of key measures as well as links to additional relevant measures, information about current state and national initiatives, and reports connected to the topic. Disaggregation is available by region, racial/ethnic group,

⁴ Interview with Andrea Whitsett. 27 Jul. 2011.

For more information on the Boston Indicators Project, visit http://www.bostonindicators.org/Indicators2008/

⁶ Wilder Research. *Minnesota Compass*. 2011. http://www.mncompass.org/>.

gender, and age, and comparisons to the US and to other states are available for some indicators as well. Most indicators include affirmatively stated goals about what Minnesota wants for its future: children & youth, civic engagement, early childhood, economy, education, environment, health, housing, public safety, and transportation.

Minnesota Compass, in comparison to the other indicator systems studied, presented one of the strongest senses of community well-being and community building. Two indicators in particular can illuminate such a focus: perceived sense of community and children's connection to caring adults—both of which were only found in this indicator system. In working toward community progress, the former is especially important, for it is essential to have a faith in the ability to effect lasting change in order to begin the process of doing so. The community commitment found in Compass is also manifest in the aforementioned focus on addressing disparities, for which they have begun an initiative called *Closing the Gap*.⁷

Planning, Performance, and Progress

The following state-level indicator projects arose out of a desire and commitment to track the progress that the government was making in achieving its goals. They stem from the wave of popularity of performance and accountability measures from the late 1980s and early 1990s (and continuing since). They seek to establish a vision for the state and a plan for how to get there.

Minnesota Milestones

Minnesota Milestones was started by Republican Governor Arne Carlson in 1991 as a way of involving the public in establishing goals for the state's future and was influenced by Oregon Benchmarks (discussed below). Over a two year period, community meetings, surveys, letters, and public comments enabled citizens to express their ideas. The public was again involved in updates in 1997 and 1998. In 2002, when Governor Tim Pawlenty came into office, he ended the Milestones program, but it was revived by the State Legislature in 2009 and will now be updated annually.

-

⁷ http://www.mncompass.org/disparities/close-the-gap.php

Minnesota Milestones was influenced by the principles from *Reinventing Government*, the plan to make the public sector more innovative and less bureaucratic that was championed during the Clinton Administration.

- what gets measured tends to get done
- if you don't measure results, you can't tell success from failure
- if you can't recognize success, you can't reward it
- if you can't recognize failure you can't learn from it⁸

Structure of Milestones

Milestones consists of 60 indicators divided into four categories: People, Community/Democracy, Economy, and Environment. Indicators are grouped under affirmative statements about Minnesotans' values and shared goals, such as "Our children will not live in poverty" and "Minnesotans will improve the quality of the air, water, and earth." Minnesota Milestones is currently the only one of the state-wide indicator systems to include a measurement of subjective well-being, here the Gallup/Healthways Well-Being Index.

Asking the Right Ouestions

During the citizen engagement process, tens of thousands of people of various backgrounds and political views participated in facilitated group discussions of nine to fourteen individuals, often those who had been highlighted by local officials as key community leaders. Tom Gillaspy, the State Demographer and the coordinator of Milestones, mentioned that during the group interviews, citizens were asked "What do you want Minnesota to be like for your grandchildren?" rather than "What do you want for yourself?" and he found that such a distinction was key. In his involvement with this original bottom-up process, he was struck by how remarkably similar everybody was when asked such a question despite the diverse backgrounds and beliefs of the participants.9

 $^{^8}$ Minnesota Planning. "What is Minnesota Milestones?" http://www.mnplan.state.mn.us/pdf/mileston.pdf 9 Interview with Tom Gillaspy. 29 Jul. 2011.

Mr. Gillaspy felt that much of political debate arises out of a focus on *tactics* rather than *goals*. If we are to achieve a better future, then we need to have some basic shared ground about how it should look, and without such a vision debates are wont to devolve into mere games. In a recent report he wrote for the State Legislature, he highlighted the need for the state to come up with a simple statement of purpose or vision to which it could hold all future legislation.

Challenges

The greatest obstacles that Milestones has faced have been a lack of institutionalization and an ambiguity of purpose. The lack of institutionalization has been the greatest challenge for Milestones. Mr. Gillaspy noted that it was never fully integrated into the budget and was, in its origin, just a "general concept" without a clear purpose. Because of its lack of institutionalization, it was subject to changes in the state administration. Governor Ventura agreed to continue the program, but Governor Pawlenty saw no value in it and discontinued it, viewing it as a form of government overreach. Milestones' home in the Department of Administration, where janitorial services and procurement are also housed, further evinces this confusion about what the purpose of Milestones is for the state government. Similarly, it has remained underfunded and has been mainly a project of the state demographer's nights and weekends in January. Mr. Gillaspy saw additional limitations in the bottom-up process adopted by Minnesota Milestones. He found it to be expensive and time-consuming; after the long process, the state was left with an overwhelming amount of data out of which to derive coherent meaning. He recommended a more streamlined approach that would engage community leaders in order to ensure institutional support.

Oregon Benchmarks

Oregon Benchmarks developed out of *Oregon Shines*, the strategic plan created by Democratic Governor Neil Goldschmidt in 1989. It is overseen by the Oregon Progress Board, a group of state senators and representatives, community leaders, and the Governor. There are two ex-officio seats reserved for the Director of Administrative Services and a student. *Oregon Shines* was updated in 1997 and 2008.

Raising Questions, not Answers

The stated purposes of Benchmarks are to provide a long view perspective in solving economic, environmental, and social problems; to provide key performance measures for state agencies; and to provide county governments and community organizations with benchmarks to gauge local progress. The most recent report asserts a position of neutrality and nonpartisan spirit, noting that Oregon Benchmarks does not seek to analyze underlying causes or provide answers but to "inspire constructive exploration of why Oregon's results are the way they are and how to make them better."

Setting Goals

The Oregon Benchmarks focuses on three key goals: quality jobs for all Oregonians; safe, caring, and engaged communities; and healthy, sustainable surroundings. There are a total of 158 benchmark indicators, and for each one, there is an explanation of what is being measured and how it fits into the aforementioned tripartite vision. Over 100 of the indicators are gradable, attributed a score of "YES," "YES, but," "NO, but," or "NO." Disaggregation is available for

Senate and House districts.



Although targets are established for some benchmarks, a number of them either have no target or a "to be determined target"; other indicators suffer from insufficient information. There

¹⁰ Oregon Progress Board. *Oregon Benchmarks*. 13 Mar. 2009. http://www.oregon.gov/DAS/OPB/obm.shtml.

are also some places within Benchmarks where there is insufficient data, particularly many of the indicators around plants and wildlife. Nevertheless, their inclusion in Benchmarks provides a significant first step toward ascertaining the appropriate form of evaluation/assessment.

No Target	Targets TBD	Not Yet Available
Employment in rural OR	Ready to Learn	Public Management Quality
Cost of doing business	Adult Literacy	
% of HS Graduates Receiving	Voting	
Certificate of Initial Mastery		
Educational Attainment:	Arts Participation	
Some College Completion		
Taxes & Charges	Natural habitats	
Alcohol Abstinence during		
Pregnancy		
Poverty		
Plants & Wildlife		

Challenges

Oregon Benchmark, like Milestones, has faced institutional problems. The Oregon Progress Board was defunded for 2009 to 2011 because of budget limitations. Its website is being hosted by the Department of Administrative Services during this period. Moreover, the Oregon Benchmarks website fails to offer the same interactive means of engagement as other projects like Arizona Indicators and Minnesota Compass which foreground the importance of user-friendly data visualization.

Virginia Performs

The Council on Virginia's Future was established in 2003 by Democratic Governor Mark Warner and tasked with developing a vision and long-term goals for the state as well as a

corresponding performance measurement and accountability system. Governor Robert McDonnell is currently chairman of the Council, and prominent Virginia businessman and philanthropist John O. Dynne serves as vice chairman. Four members from each state legislative body, two members of the Governor's cabinet, the Lieutenant Governor, and six citizens and businessmen complete the council. The political representation among the legislative members is split between two parties albeit not evenly in each body; three out of the four Senators in the Council are Democrats whereas three out of the four Representatives are members of the Republican Caucus.

Virginia Performs contains seven categories, each with a corresponding goal statement: Government and Citizens, Economy, Education, Health and Family, Natural Resources, Public Safety, and Transportation. Each goal is measured by a set of seven Quality of Life indicators, which are graded as "improving," "maintaining," or "worsening." Virginia Performs also highlights the scope of state influence on each indicator and allows for disaggregation and comparison by county and region.¹¹

The State of Sustainability

Hawai'i 2050

The Hawaii 2050 Task Force consisted of 25 members appointed by the Governor, Speaker of the House, Senate President; the mayors of the counties of Hawai'i, Kaua'i, Maui, and Honolulu; the President of the University of Hawai'i; the Director of the Office of State Planning; and the State Auditor. In 2005 the Task Force conducted a comprehensive review of the Hawai'i State Plan, and in 2007 they submitted a plan to the Legislature. Act 225 of the State Legislature called for a group of scholars at the University of Hawaii to develop defined data, data sources, and benchmarks for each of the major goals; to consult with leaders and organizations relevant to each of the main goals of the H2050 plan; and to report findings and recommendations. Republican Governor Linda Lingle vetoed the Legislature's bill supporting the plan, but the Legislature overrode her.

¹¹ Council on Virginia's Future. *Virginia Performs*. 2011. http://vaperforms.virginia.gov/>.

The Hawai'i 2050 report defined sustainability along the following principles: balancing economic prosperity, community/social well-being, and environmental stewardship; a strong, diversified, and dynamic economy; and respect for cultural traditions, history, and sense of place. Accordingly, the report is divided into four goals: A Way of Life, The Economy, Environment and Natural Resources, Community/Social Well-Being, and Culture and Island Values. Hawaii distinguishes itself from other states by a unique culturally-rooted emphasis on sustainability through its island heritage. ¹²



Through a series of facilitated discussions with over 10,000 citizens across the state, the Task Force established a set of indicators for each goal as well as a list of top priorities. The top three priorities that came out of the discussion were to increase affordable housing opportunities, to strengthen public education, and to reduce reliance on fossil fuels. In the second round of engagement, that following Act 225, the top priorities were slightly different. Stakeholder surveys with previous members of the Task Force (including those from business, labor, education, state and local governments, Kanak Maoli, nonprofits, environmental organizations, and youth groups) and other involved actors found that the top three goals were "developing a more diverse and resilient economy," "developing a sustainable ethic," and "reducing Hawaii's reliance on fossil fuels." A series of face-to-face dialogue sessions with community leaders from different counties yielded a similar list, differing only in the priority ranked third, now "support

17

^{12 &}quot;Hawai'i 2050 Sustainability Task Force." 2007. http://hawaii2050.org/

educational efforts in the schools to support green jobs and the communities towards living a more sustainable life." ¹³

Hawaii's plan distinguished itself from the others because of its comprehensive/holistic take on sustainability. The following are a few indicators unique to Hawaii's first plan that exemplify a commitment to equity and thriving local economies:

- ✓ Dollars spent in locally owned businesses
- ✓ Income of top quintile relative to bottom quintile
- ✓ Living wage jobs relative to total jobs (%)
- ✓ Proportion of food produced and consumed locally
- ✓ Percentage of renewable and alternative energy produced locally
- ✓ Percentage of population ridesharing
- ✓ Percentage of total non-motorized trips
- ✓ Invasive species introduced to Hawaii annually

The set of indicators proposed by the Task Force were re-evaluated by the work of the Social Sciences Public Policy Center and are still in a process of finalization. Among the new suggestions for indicators were green job training programs at high schools, community colleges, and universities; gasoline and diesel fuel consumption; and diversity of recreational facilities per capita.

The first round of Hawaii 2050 proposed the creation of a 17 member Sustainability Council, which would be housed in the Office of the Auditor then transferred to the Office of Planning and would consist of a mix of government official and community members, with at least one seat held by a youth under the age of twenty-five. As envisioned, the Council would collect and analyze the approved sustainability indicators, publish annual "report cards" on them, convene statewide summits and forums, sponsor cross-sector dialogue, recommend sustainability-related legislation, and conduct an ongoing public awareness campaign. The follow-up round of discussions and analysis conducted by the Social Sciences Center found that the public was not keen on having a centralized state-run council as the sustainability coordinating entity but preferred either an umbrella organization or nonprofit entity for such a role.

¹³ Social Sciences Public Policy Center, University of Hawai'I at Manoa. "Hawaii 2050 Update: Report in Response to Act 225, 2008 Session Laws of Hawaii Relating to Sustainability." Jan. 2010.

Last month, the Hawaii State Legislature, in accordance with the recommendation of the Social Sciences Policy Center's follow-up report, voted to incorporate principles of sustainability into the state statutes. The section on the overall direction of the state now includes sustainability as a stated priority, and the section on state planning asserts the importance of the following steps:

- (1) Encouraging balanced economic, social, community, and environmental priorities
- (2) Encouraging planning that respects and promotes living within the natural resources and limits of the State
- (3) Promoting a diversified and dynamic economy
- (4) Encouraging respect for the host culture
- (5) Promoting decisions based on meeting the needs of the present without compromising the needs of future generations
- (6) Considering the principles of the ahupaa¹⁴ system; and
- (7) Emphasizing that everyone, including individuals, families, communities, businesses, and government, has the responsibility for achieving a sustainable Hawaii¹⁵

Although this in and of itself is not a policy change, by institutionalizing/codifying the language around sustainability, it provides a written commitment to which legislators can be held accountable.

Challenges

One of greatest obstacles for the Hawaii 2050 plan was the lack of support from the current governor, and there were also logistical difficulties in the outreach process, considering that Hawai'i is a state made up of islands. Sharon Moriwaki, who has led the efforts from the Social Sciences Policy Center, noted that politicians often fear bold, new ideas and projects like Hawai'i 2050 are often at risk for budget cuts. However, she maintains significant hope for the initiative's future because of the growing public attention toward sustainability and because of the aforementioned incorporation of sustainability language into the State Statutes—"no small feat."

¹⁴ Defined as "a traditional native Hawaiian resource and behavioral management system that ensures respect for the air, land, water, and other scarce natural resoruces that make life sustainable from the mountains to the sea" (Section 226-2, Hawaii Revised Statutes

¹⁵ Section 226-1, Hawaii Revised Statutes.

¹⁶ Interview with Sharon Moriwaki. 4 Aug. 2011.

New Jersey Sustainable State Project

New Jersey began its Sustainable State Project in 1995, and four years later, after producing a report *Living with the Future in Mind*, Republican Governor Christine endorsed the set of indicators established by the Project in an executive order, calling for the creation of annual progress reports and for the creation of an interagency working group on sustainability. New Jersey Future, an independent quasi-governmental body, produced the report outlining the indicators, *Living with the Future in Mind* (2000), and an Interagency Sustainability Working Group provided a set of complementary goals in *Governing with the Future in Mind* (2000). Follow-up reports to *Living with the Future in Mind* were released in 2004 and 2007, but there has been no update to *Governing with the Future in Mind* because of a change in administration.

Learning from Others

New Jersey's interest in such a project was sparked by a fact-finding trip to the Netherlands in 1994. The members on the trip, both from politics and civil society, observed how a consensus around sustainability had been build in the Netherlands, one that had engaged businesses, regulators, and private citizens. Upon return, the State of New Jersey and New Jersey Future, the state's smart growth advocacy group, held a series of roundtables with nearly 200 leaders from business, the environmental movement, civic groups, and academia to create a discussion around sustainable development. A set of prominent experts were assigned to each goal and tasked with creating appropriate sets of indicators. Their recommendations were then opened for public comment in conferences, regional workshops, and working sessions across the state in order to help the indicator system reach its final form.¹⁷

Tools for Education and Evaluation

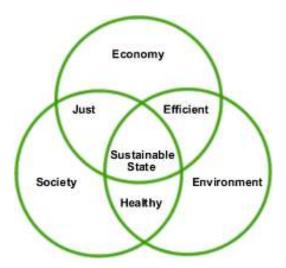
The report card established in the Sustainable State Project report was designed to educate the public and state agencies about what the state *is* doing, to foster dialogue about what

¹⁷ Sustainable State Project. Living with the Future in Mind: Indicators for New Jersey's Quality of Life. December 2000.

the state *should* be doing, and to create channels for the integration and assessment of such measures. The Sustainable State Project focused on the following eleven goals: economic vitality; strong community, culture, and recreation; quality education; good government; decent housing; healthy people; efficient transportation and land use; natural and ecological integrity; protected natural resources; and minimal pollution and waste.

Tripartite Vision

The Sustainable State Project provides a visualization of the concept the sustainable state through a set of interlocking circles representing economy, environment, and society—an illustration akin to that of the "triple bottom line." From the intersections of these conceptual circles come the key principles of justice, efficiency, and health—all of which together produce the foundation for a sustainable state.



The report highlights how each indicator chosen will inevitably have an effect on all three, and to illuminate this, each indicator is placed on an appropriate conceptual point in the diagram. Not all of the connections made are obvious, and a number show much insight into the interconnectedness of the three domains. Consider, for instance, the following:

Unemployment & the Environment: "Lack of a job hinders our ability to care about the environment as we become necessarily preoccupied with daily survival."

Equal Pay & Environment: "Economic power often translates into political power, which can mean greater environmental protection for some at the expense of others." ¹⁸

Additionally, in the *Governing with the Future in Mind* report, the Sustainable State Project also suggested the inclusion of a Green State Product, a measurement that factors the costs of environmental degradation from loss of biodiversity and climate change into GDP, as an economic indicator; however, there has been no institutionalization of this measurement.¹⁹

NJ Future and the Future

As has been the case with many indicator projects, the NJ Sustainable State Project faced obstacles after a change in leadership. Although Governor Christine Todd Whitman signed off on the plan, initiating the first and only report of Governing with the Future in Mind, her successors were not keen on the project, some because of a lack of interest in sustainability and others because of a belief that an indicator project was a politically charged distraction from regulation. Nevertheless, those from New Jersey Future who spearheaded the Sustainable State Project have continued their efforts, working from the ground up with the Sustainable Jersey initiative. They have pioneered a certification system for municipalities in order to get concrete action and local buy-in across the state. First, a municipality must register with Sustainable Jersey and submit a formal statement of interest; subsequently, the municipality has to follow through with a set of actions and provide documentary evidence of their progress and/or completion. Seventy municipalities have already reached a bronze level of certification (150 points), four have reached a silver level (350 points), and a number of other municipalities across the state have expressed interest in the process. Because of the success of the Sustainable Jersey initiative so far, the Sustainable State Institute, currently housed in the Municipal Land Use Center at The College of New Jersey, is beginning to work out the details for a new state-wide indicator project, one that could reflect the stakeholder engagement they have accomplished through the certification process.

¹⁸ Sustainable State Project. *Living with the Future in Mind: Indicators for New Jersey's Quality of Life.* December 2000.

¹⁹ Interagency Sustainability Working Group. *Governing with the Future in Mind*. 2000.

The Sustainable Jersey certification places a strong emphasis on community outreach and engagement. In addition to action steps around green building and energy use, it asks participating municipalities to organize green challenges, ensure diversity on boards and commissions, strengthen school arts programs, and engage in a community visioning process in order to form a sustainable community plan. The latter highlights the key role that democracy and citizen engagement must play in any successful sustainability effort. The Sustainable Jersey certification process also includes action steps around wildlife protection, local food and local economies, and green job creation. In addition to such action steps, Sustainable Jersey also offers a number of funding opportunities around innovative energy products, green fleets, energy-efficient buildings, and other steps for participating municipalities. The Sustainable Jersey program is also planning to develop a certification process for schools and small businesses.²⁰

Putting it All Together: Composite Indicators

By aggregating a set of targeted measures, composite indicators yield both advantages and disadvantages. Positively, they are able to condense a large number of indicators into a meaningful number that can better attract public interest and allow for quick comprehension of complex information, and their growth can be compared directly to that of GDP. However, in order to aggregate the select measures, some indicators must be inevitably left out of the picture.

Genuine Progress Indicator

The goal of the Genuine Progress Indicator (GPI) is to provide a composite index that mimics GDP but accounts for the benefits provided by nonmarket activity and for the social and environmental costs that may result from economic growth. GDP growth, often touted by politicians as a sign of success, does not necessitate an increase in societal well-being or quality

²⁰ http://www.sustainablejersey.com/actionlist.php; Interview with Randy Solomon, 24 Aug. 2011.

of life. William Nordhaus and James Tobin (1973) were the first to propose a reworking of GDP to focus on the activity, market or nonmarket, that promotes societal well-being with their Measure of Economic Welfare, and this idea was further expanded upon by Herman E. Daly and John B. Cobb Jr. in *For the Common Good* (1989) with their Index of Sustainable Welfare. ²¹ Daly and Cobb, bringing together ideas from religion, philosophy, natural sciences, environmentalism, feminism, and history, presented an alternative understanding of economics to the neoliberal growth paradigm that would emphasize stewardship of both our human community and environmental resources. Like GDP, the Index for Sustainable Welfare started with personal consumption. From there, it added public non-defensive expenditures, capital formation, and services from domestic labor and then subtracted private defensive expenditures, the cost of environmental degradation, and the depreciation of natural capital:

ISEW = personal consumption

- + public non-defensive expenditures
- private defensive expenditures
- + capital formation
- + services from domestic labor
- costs of environmental degradation
- depreciation of natural capital

Out of the discussion for a new measure of sustainable welfare came the design of the Genuine Progress Indicator. The nonprofit *Redefining Progress*, based in San Francisco, has been calculating the Genuine Progress Indicator for the United States since the mid 1990s²². GPI measurements have been conducted in four states so far: Maryland, Ohio, Utah, and Vermont.²³

William Nordhaus and James Tobin, "Is Growth Obsolete?" In *The Measurement of Economic and Social Performance, Studies in Income and Wealth*, ed. Milton Moss, 509-564. Vol. 38, National Bureau of Economic Research, 1973; Cobb, John Jr. and Hermany Daly. *For the Common Good: Redirecting the Economy toward Community, the Environment, and a Sustainable Future*. Boston: Beacon Press, 1989.

²² Redefining Progress. "Gross production vs genuine progress". Excerpt from the Genuine Progress Indicator: Summary of Data and Methodology. 1995.

²³ Costanza et al. "Estimates of the Genuine Progress Indicator (GPI) for Vermont, Chittenden County and Burlington, from 1950 to 2000." *Ecological Economics*. 51:1-2 (2009): 139-155; Kenneth Bagstad and Md Rumi Shamin. "The Genuine Progress Indicator as a Measure of Regional Economic Welfare: a Case Study for Northeast Ohio." In preparation for *Ecological Economics*. In preparation. Target journal: *Journal of the American Planning Association*; Gunseli Berik and Erica Gaddis, "The Utah Genuine Progress Indicator (GPI), 1990-2007: Report to

The calculations done in Ohio and Vermont were academic studies and not directly a part of a broad effort at changing state indicators; consequently, we will focus on the other two.

Maryland is the only state to have begun to use the GPI within state planning; although the GPI has not advanced as far as such in Utah, its calculation came out of an initiative to promote measurements that highlight the environmental and social consequences of economic growth.

Maryland is the only state to have officially adopted the Genuine Progress Indicator. In spring of 2009, Democratic Governor Martin O'Malley established an inter-agency working group to develop measures of well-being outside of traditional indicators like GDP/GSP. The working group collaborated with the University of Maryland's Center for Integrative Environmental Research, home to Herman Daly, one of the main economists behind the idea of "uneconomic growth" and the "steady-state economy." O'Malley is the first elected official to advocate for the use of the GPI, explaining, "A strong economy, a clean environment and a healthy citizenry go hand in hand; none can be a true measure of success without supporting the other two. The GPI will help us ensure that our economic growth will not come at the cost of our natural resources, and that they both support our progress toward a sustainable future and a better quality of life for all Maryland families."²⁴

Although O'Malley remains on the vanguard of governors for such an initiative, there have been efforts in other states to bring the GPI to the attention of elected officials. The Utah Population and Environment Coalition was founded in 1997 to address the concerns of population increases and resource consumption in Utah, especially along the Wasatch Front. Since 2005, it has been a program component of the Wellness Health and Lifestyle Center (WHALE), an interfaith nonprofit that focuses on spiritual healing and overall well-being. UPEC's objectives are to encourage programs that promote healthy environmental, sustainability, and population policies; to educate the public on these issues through research and through resources for schools, faith communities, and other groups, and to build a network around these aims. UPEC has a sustainability indicator project called Vital Signs, which organizes impartial, broad-based academic efforts to analyze the state's progress toward

²⁴ Governor O'Malley Launches Genuine Progress Indicator." 3 Feb. 2010. http://www.dnr.state.md.us/dnrnews/pressrelease2010/sgg 020310.asp

sustainability. So far, they have calculated their state's ecological footprint and Genuine Progress Indicator.²⁵

GPI Methodology and Limitations

Like GDP, the GPI begins with the measurement of personal consumption; however, it adjusts this number using the Gini coefficient to account for income inequality. From there, it measures the cost and service from consumer durables, such as cars and furniture; the cost of underemployment; and net capital investment. To include social well-being into the concept of genuine progress, the GPI includes the value of nonmarket activity like housework and volunteer work which would not be factored into GDP, and it also includes the value added by higher education and the service provided by streets and highways. Looking at the social costs that come with growth, the GPI highlights the cost of family changes, crime, personal pollution abatment, lost leisure time, commuting, and motor vehicle crashes. Environmental costs attributed to Pollution (air, noise, water), loss of natural lands (farmlands, forests, wetlands), climate change, ozone depletion, and non-renewable energy resource depletion.



Although calculations of the Genuine Progress Indicator adhere to the aforementioned list of sub-indicators/measures, there is as of yet no officially standardized methodology for

²⁵ Utah Population and Environment Coalition. "About Us." < http://www.utahpop.org/aboutus.html>.

determining the value of each. If the derivations of the indicators are different, then individual GPI studies provide only limited comparability. Consider, for instance, the following points of variation:

- o Personal Consumption: When calculating personal consumption, the Maryland GPI accounts for all consumption whereas the Utah GPI deducts spending on alcohol, cigarettes, and junk food from the total. This step makes logical sense if the GPI's purpose is to "add up all the good's and subtract all the bad's," and one could assume that most people would not consider spending on these three items to be a sign of societal progress. Nevertheless, if only "good" personal consumption should count, where should one establish the appropriate boundaries? Purchases of gasoline, of bottled water, and of disposable goods in general [have obvious environmental costs inherent to them. The original *Redefining Progress* report that laid out the GPI methodology even noted the fact that the total of personal consumption should deduct all regretted purchases; it only did not do so because of insufficient data.²⁶
- Ocost of Crime: Whereas the Maryland GPI does not include the cost of security/defensive measures in their calculation, the Utah GPI factors in the cost of security systems, safe deposit boxes, and concealed firearms—three purchases made for the sake of deterring crime/self-protection. Moreover, Maryland accounts for loss of quality of life but not for loss of life whereas Utah calculates loss of life from murder in line with the attribution of economic value to a human life used in the section on vehicle crashes.
- Value of Household Labor: Both Maryland and Utah calculate this through taking the number of hours of household labor performed and multiplying it by the wage rate for a housekeeper or maid. However, other measurements of this indicator in other GPI

²⁶ Redefining Progress. "Gross production vs genuine progress". Excerpt from the Genuine Progress Indicator: Summary of Data and Methodology. 1995.

calculations, such as that of the Canadian province of Alberta, have expanded it to include the value of parenting and elder care.²⁷

Such questions do not undermine the usefulness of the GPI as a tool or of individual calculations, but rather they call for continual revision of the methodology, something that the GPI's greatest advocates recommend as well.²⁸

Furthermore, as the GPI began as a form of national accounting, efforts to evaluate GPI on the sub-national level can run into risks because of a lack of appropriate data. Researchers then have to interpolate numbers for states or provinces from national data.²⁹ Both Maryland and Utah had to interpolate data from national reporting for a number of measurements, including the following: consumer durables, net capital investment, noise pollution, farmlands, and ozone depletion. Similarly, for other indicators, volunteerism, value of higher education, car crashes, commuting, monetary attributions from national statistics were used although such numbers could vary state to state.

Other critics have accused the GPI of building value judgments into its calculations.³⁰ However, such criticisms are a result of the nature of composite indices as such and would apply in any case. The GDP, as currently used, can be criticized for making value judgments as well. As noted earlier, although Simon Kuznets, its founder, did not mean for the GDP to be used as a measure of social welfare, elected officials often attribute such a meaning to it and, thus, create the impression that all growth is good growth. By challenging this belief, the GPI provides an important service to policy debates and evaluation; for instance, Maryland has begun testing out the GPI for land use decisions and hopes to expand its use to other departments in the near future ³¹

Minnesota Progress Indicator

²⁷ Anielski, Mark and Colin L. Soskolne. "Genuine Progress Indicator Accounting: Relating Ecological Integrity to Human Health and Well-Being." Just Ecological Integrity: The Ethics of Maintaining Planetary Life. Ed. Peter Mille rand Laura Westra. New York: Rowman & Littlefield, 2002. Page 88.

²⁸ Cobb, Clifford and John Talbert. "Sustainable Development and the Genuine Progress Indicator: an Updated Methdology and Application in Policy Settings."

²⁹ Clarke, Matthew and Philip Lawn. "Is Measuring Genuine Progress at the Sub-National Level Useful?" Ecological Indicators 8 (2008): 575.

³⁰ For instance, see the following: Lawn, Philip. "A Theoretical Foundation to Support the Index of Sustainable Economic Welfare (ISEW), Genuine Progress Indicator (GPI), and Other Related Indexes." Ecological *Economics* 44 (2003): 105-118.

31 Interview with Sean McGuire. 26 Jul. 2011.

The Minnesota Progress Indicator was proposed in 1999 as an alternative to GDP in the report *Smart Signals: Economics for Lasting Progress* by the Environmental Quality Board, a part of the state's Sustainable Development Initiative that consisted of five citizens and ten agency heads. Unfortunately, the Minnesota Progress Indicator was never adopted. The Sustainable Development Initiative morphed into the Smart Growth Initiative under Governor Ventura and was discontinued by Governor Pawlenty. Some remnants were incorporated into the updated version of Milestones; however, Milestones does not have the same explicit focus on sustainability as the Progress Indicator.

The Minnesota Progress Indicator derives its methodology from the Genuine Progress Indicator, Minnesota Milestones, and the *Describing a Healthy Economy* report from Minnesota's Sustainable Development Initiative. In framing a vision of sustainability, the report asserts, "A sustainable economy is not so much as about balancing or trading off 'the environment' against 'the economy,' or 'the economy' against 'community. Instead, it seeks to improve all three simultaneously." The design of the Minnesota Progress Indicator reflects such a vision of the interconnectedness of the three aspects of sustainability. Forty-two measures categorized under five goals provide the basis for the calculation. When these are categorized into the three sub-indexes (economic, environmental, and community), a number of the chosen measures overlap between categories, showing a measure can reflect both the economy and the environment or the economy and community. Such overlap yields 26 measures for the economic index, 21 for the environmental index, and 15 for the community index. Each index can exist as its own alongside the composite index of the overall Minnesota Progress Indicator.

The Minnesota Progress Indicator attempts to address a few of the limitations of the Genuine Progress Indicator methodology. The numbers for all forty-two measures comes from data available at the state level, rather than those that need to be interpolated from national data—an adaptation that aligns well with the stated goals of timeliness, frequency, and validity for a successful indicator. Similarly, although not all of the measures are raw pieces of data themselves (the Herfindahl index is used to describe employment distribution, for instance), the Minnesota Progress Indicator does not attribute arbitrarily chosen monetary values to different social and environmental costs/benefits. Similarly, it attempts to avoid some of the value

³² Minnesota Planning Environmental Quality Board. "Smart Signals: An Assessment of Progress Indicators." March 2000.

judgments built into the GPI, such as the inclusion of "cost of children's television watching" in its indicator of cost of family changes. Another strength of the MPI is its ability to contextualize income and Gross State Product. Consider, for example, the inclusion of measures like the following:

- o GSP per unit of energy consumption
- o GSP per amount of waste
- Percent of median income needed for basic needs
- o Income growth of the poor versus the wealthy
- Tuition costs as a percent of median disposable income
- o Health care expenses (out-of-pocket) as a percent of annual income
- Median annual rent compared to median annual income of renters

These indicators highlight various ways in which tracking income itself holds little value if one does not also the social uses and environmental costs connected to it. The Minnesota Progress Indicator also attributes value to biodiversity, monitoring population trends of key species in five different habitat types.

However, there remain some limitations to the Minnesota Progress Indicator. The report does not explain the calculations it used to derive the resulting indexes from the defined measurements sets. Even though the genuine progress indicator can appear arbitrary at times in doing so, it does succeed in turning all of its measurements into the same units, i.e. dollars, a step which facilitates aggregation. Furthermore, the advantage of the distinctiveness with which the MPI regards the economy of Minnesota limits the ability of comparison with other states; the use of value-added timber and value-added agriculture in the discussion on local production becomes most salient in such regard. Additionally, by not assigning monetary equivalence to its set of measures, the methodology behind the composite index becomes unclear as the equations used to convert the economic, environmental, and community indexes into discrete numbers—and the three into a final composite one—are not provided.

Caution and Context with Indicators

As the selection and use of indicators will inevitably entail certain value judgments, it is important to specify the reasons for the inclusion of a measurement and how it contributes to progress. Several indicator projects include taxes, either for business or for individuals, in their

list of indicators. The Oregon Program Board wisely attempts to avoid a value judgment on this issue by not assigning it a target; nevertheless, with every measure that one includes in an indicator system, there is a built-in assumption of a positive direction and a negative direction. For instance, we would like high school dropout rates and energy consumption per capita to decrease, and we would like the number of insured individuals and the percentage of renewable energy sources to increase. By measuring tax rates, indicator projects can provide factual trend data to policy debates, showing how tax rates stand in the present versus the past; however, one must avoid an assumed normative trajectory. The data in Virginia Performs comes from the Tax Foundation, which holds an anti-tax ideology and has had its credibility come into challenge numerous times. Neither high taxes nor low taxes are intrinsically good; consider, for instance, the problems associated with high taxes in support of war or low taxes that undermine a social safety net.

Furthermore, the measurement of per capita income and GDP in a number of the indicator systems should also be viewed with caution. Per capita valuations do not address the existence of inequalities that can skew measurements upward. The adjustment of such numbers for income inequality, such as what the GPI does with personal consumption, or the inclusion of statistics around income inequality, as some of the other indicator systems do, complement these measurements, addressing whether or not everyone or only a select few individuals benefit from such an increase in per capita measurements.

On the Pursuit of Happiness

One month ago, on July 19th, the General Assembly of the United Nations adopted a resolution to encourage member countries to consider happiness and well-being in their measurement of social and economic development and evaluation of policy. This non-binding resolution further asserted that the "pursuit of happiness is a fundamental human goal." Such a goal, despite its long history, has been receiving increasing attention over the past few years as people have questioned not only the environmental cost of economic growth but also that of

³³ Thomas, Mark. "The Greek Menace." *Economist's View.* 19 Aug. 2008.

http://economistsview.typepad.com/economistsview/2008/08/the-greek-menac.html>.

^{34 &}quot;Happiness Should Have Greater Role in Development Policy—UN Member States." 19 Jul. 2011. http://www.un.org/apps/news/story.asp?NewsID=39084&Cr=general+assembly&Cr1=

social and psychological well-being. Measuring happiness or subjective well-being can offer an enlightening alternative to measuring economic growth in a world facing increasing resource limits. But what, one might ask, is happiness?

The questions of how to define and to promote happiness have remained in a prominent space in the subject of philosophical debate since Ancient Greece. Greek philosophers focused on the concept of *eudaimonia*, which has been translated as either "happiness" or "flourishing." The Aristotelian concept of eudaimonia prioritized the exercise of virtue whereas the Socratic version prioritized the concept of meaning or purpose in life. During the Enlightenment, British utilitarianism re-emphasized this centrality of happiness in public affairs; the Benthamite hedonic calculus focused on sensations of pleasure and pain as the evaluation of policy selection and personal actions.³⁵ However, although the language of happiness has long been around in political documents, such as our nation's Declaration of Independence, the concept of the "gross national happiness," especially as an alternative or complement to GDP, is a fairly recent creation, coined in 1972 by the King of Bhutan. 36 He embraced the idea of the "gross national" happiness" as a way of addressing the social, environmental, and emotional costs associated with a development paradigm rooted in economic growth. The Centre for Bhutan Studies took this phrase and developed a formal methodology around it with the help of international experts in economics and psychology, resulting in surveys and policy evaluation tools that have been used since 2008.

This quest for happiness has gained the favor of European political leaders in recent years as French President Nicolas Sarkozy and British Prime Minister David Cameron have both called for such measurements of national happiness. In 2008 Nicolas Sarkozy commissioned Noble-prize winning economists Amartya Sen and Joseph Stigilitz to develop a framework for an alternative to GDP that could focus on such aspects of subjective well-being, and this past year UK Prime Minister David Cameron commissioned an annual governmental survey of the UK's well-being.³⁷ Critics on both sides of the political spectrum have accused these schemes as beings ways to whitewash an ailing economy, as ways for political leaders to ignore persistent

³⁵ For an extensive history of the evolution of the concept, see the following: McMahon, Darrin. *Happiness: a History*. New York: Atlantic Monthly Press, 2005.

³⁶ Centre for Bhutan Studies. "Gross National Happiness Website." http://grossnationalhappiness.com/>.

³⁷ Fitoussi, Jean-Paul, Amartya Sen, and Joseph Stigilitz. *Report of the Commission on Economic Performance and Social Progress*. 14 Sept. 2009; "David Cameron Aims to Make Happiness the New GDP." *The Guardian*. 24 Nov. 2010. < http://www.guardian.co.uk/politics/2010/nov/14/david-cameron-wellbeing-inquiry>.

problems of unemployment and inequality by citing general happiness; however, scholarly research has shown a link between unemployment and reduced well-being.³⁸ Some other critics have accused these efforts of being an attempt to revive utilitarianism or of wanting merely to put everyone in a happy mood all the time.³⁹ However, prominent researchers in the field of happiness economics and subjective well-being have countered such claims, emphasizing the connection between subjective well-being and human flourishing and foregrounding this as the use of "happiness."⁴⁰ Experts in the field also frequently assert the need for political neutrality and sound methodology in the implementation and use of such indexes.⁴¹

Gross National Happiness-USA

The idea of measuring "happiness" as a sign of national progress has a special resonance in the United States, where the concept of a "pursuit of happiness" is built into the Declaration of Independence as an inalienable right. Although the idea of measuring such subjective well-being has taken off more rapidly in other countries than our own, the past few years have, however, seen heightened interest, especially with groups like Sustainable Seattle, well-known as an exemplar of community-led sustainability programs, on the city level and GNH-USA on the state level introducing such happiness surveys to the United States. As this report is highlighting state-level trends, the focus will be primarily on GNH-USA.

GNH USA was formed by a group of four Vermont residents who attended the 4th international Gross National Happiness conference in Bhutan. Upon realization that the concept of GNH was virtually unknown in the United States, even among sustainable economists, they founded the organization three years ago to advocate for the use of GNH in the United States. In

³⁸ Diener, E. and M.E.P. Seligman. "Beyond Money: Toward and Economy of Well-Being." *Psychological Science in the Public Interest.* 5:1 (2004): 1-31; For criticisms, see, for instance, "Happiness is a Warm Baguette?" *The Economist* Blog: Free Exchange. 13 Jan. 2008.

http://www.economist.com/blogs/freeexchange/2008/01/happiness_is_a_warm_baguette; "David Cameron Measuring "Wrong Type of Happiness." *The Guaridan*. 10 Apr. 2011.

http://www.guardian.co.uk/politics/2011/apr/10/david-cameron-wrong-type-happiness.

³⁹ For an overview, see Bruno S. Frey and Alois Stutzer's "Should National Happiness Be Maximized?" Center for Research in Economics, Management, and the Arts. 2 Mar. 2007.

⁴⁰ Diener, Ed, John Heliwell, Richard Lucas, and Ulrich Schimmack. *WellBeing for Public Policy*. New York: Oxford Univ. Press, 2009; Seligman, Martin. *Flourish: A Visionary New Understanding of Happiness and Wellbeing*. New York: Free Press, 2011.

⁴¹ Diener, Ed et al. "Guidelines for National Indicators of Subjective Well-Being and Ill-Being." Letter. 1 Dec. 2005; Diener, Ed and Martin Seligman. "Beyond Money: Toward and Economy of Well-Being." *Psychological Science in the Public Interest.* 5:1 (2004): 1-31; Hagerty, M.R., R.A. Cummins, A.L. Ferriss, K. Land, A.C. Michalos, M. Peterson, A. Sharpe, J. Sirgy, J. Vogel. "Quality of life indexes for national policy: review and agenda for research." *Social Indicators Research.* 55:1 (20001): 1-96.

light of Vermont's history as being a laboratory for progressive legislation, the directors of GNH USA have decided to use Vermont as a laboratory for a future national expansion of GNH measurement. They are currently engaged in a bottom-up approach, training GNH ambassadors educating citizens, and attempting to build political will so that the people at the bottom ask the politicians at the top to build the GNH into the policy-making process. Their team has recently made a show-and-tell bid at the Vermont Legislature and has been working with a few key legislators who have expressed interest in GNH.

GNH USA has adapted the original GNH survey to the US context with the help of the same scholars from the UNDP that helped devise the original survey. The original BNH, as one might expect, was reflective of its national character, and the full day study with questions such as "How many times per day do you pray?" would have been a veritable culture shock in the United States. However, the nine dimensions of happiness inscribed in the GNH have been upheld

- (1) Psychological Well-being
- (2) Health
- (3) Use of Time
- (4) Community Vitality
- (5) Education
- (6) Culture
- (7) Environment
- (8) Governance
- (9) Standard of Living

The GNH survey incorporates several methodologies for measuring happiness. First, there is the method of life evaluation, best known as the Cantril Ladder sale (1965), which is used by Gallup in its World Survey and in the Gallup/Healthways Well-being Index. In this measure, an individual is asked to imagine a ladder with steps measured from 0 to 10 and to place their life on the corresponding step. Second, there is the mood assessment, represented by a question like "How happy are you today?" or "How happy were you yesterday?" Finally, there are questions on meaning or purpose, i.e. "To what extent do you feel that the things you do in

⁴² "Gross National Happiness-USA." http://www.gnhusa.org/>.

⁴³ Interview with Tom Barefoot. 2 Aug. 2011.

life are worthwile?" Happiness psychologist John Helliwell has drawn parallels between these three approaches and the philosophical views of Aristotle, Bentham, and Socrates, respectively, as discussed earlier.⁴⁴

The information provided by such surveys offers a complement, not a replacement, for other information, and Tom Barefoot, from GNH-USA, noted how the GNH and the GPI can work together well as policy tools. Sustainable Seattle, which has also begun using the USA-adapted version of the GNH survey, has already created a list of objective indicators to corresponding with each of the nine domains. For instance, measurements of voter turnout and tax fairness (i.e the percent of total taxes paid by income levels) provide objective data on governance, and rates of domestic violence and mental illness complement the survey results on psychological health. 6

Takeaways

Seeing Progress: Data visualization provides an interactive form of engagement that can both illuminate the collected information and attract public attention and action.

Tracking Progress: Although with multiple data sources, it may be difficult to ensure that all data come from the same year, standardization is needed for an authentic account of progress.

Institutionalization: Indicator projects that did not take off or got stalled often faced such problems because of a lack of "buy-in" from elected leaders across the political spectrum or from a lack of institutionalization in the budgetary process (or other processes of government). Even when institutionalized, they can be victims of spending cuts.

Building Community: Indicator projects can have the best lasting effect when the community members feel invested in the project itself, whether they serve as participants in designing a

⁴⁴ John F. Helliwell, "How Can Subjective Well-Being Be Improved?" Second draft of paper for the CSLS symposium in honour of Ian Stewart. May 2011. 5.

⁴⁵ Interview with Tom Barefoot.

⁴⁶ Sustainable Seattle. "The Happiness Initiative." 2011. http://www.sustainableseattle.org/programs/sahi.

system, respondents to a subsequent survey, or leaders of action to follow up on problems addressed.

Revisit and Revise: As new issues arise, methodologies improve, and values change, measurements of progress must progress themselves.

Quality over Quantity: This principle is key both to the measurements and the issues being measured—quality growth and quality indicators.